



U015118-6.ST25.txt
SEQUENCE LISTING

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Pathania, Ranjana
Dikshit, Kanaka Lata

<120> A METHOD FOR OXYGEN REGULATED PRODUCTION OF RECOMBINANT
STAPHYLOKINASE

<130> U 015118-6

<140> 10/814,850

<141> 2004-03-31

<150> US 60/459,439

<151> 2003-04-01

<160> 14

<170> PatentIn version 3.3

<210> 1

<211> 161

<212> DNA

<213> Artificial Sequence

<220>

<223> A nucleotide sequence of expression cassette OXY-1

<400> 1

gatcaagctt atcatcgata agcttacagg acgctgggtt aaaagtattt gagttttgat 60

gtggattaag ttttgagagg tcaataagat tataatatgt gatgcttcac aattctgatg 120

tatggcaaaa ccataataat gaacttaagg aagacctcat g 161

<210> 2

<211> 582

<212> DNA

<213> Artificial Sequence

<220>

<223> A modified staphylokinas SAK-2 gene

<400> 2

gaacttaagc atatgaaagg aaaatataaa aagggcgatg acgcgagtta ttttgaacca 60

acaggcccgt atttgatggt aaatgtgact ggagttgatg gtaaaggaaa tgaattgcta 120

tcccctcatt atgtcgagtt tcctattaaa cctgggacta cacttacaaa agaaaaaatt 180

gaatactatg tcgaatgggc attagatgcg acagcatata aagagtttag agtagttgaa 240

ttagatccaa gcgcaaagat cgaagtcact tattatgata agaataagaa aaaagaagaa 300

acgaagtctt tccctataac agaaaaaggt tttgttggtcc cagatttatc agagcatatt 360

aaaaaccctg gattcaactt aattacaaag gttgttatag aaaagaaata aaacaaaata 420

gttggtttatt atagaaagta atgtcttgat tgaatatgtg tagtgaaatt atctttcatc 480

aaattctcat tcatgcacga atggttctgc cccacctaata cagatattac gtgacttatg 540

gggagaaatc agtttgata aaagtggagg atccagtagc cg 582

<210> 3
 <211> 363
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> A peptide sequence of modified staphylokinas SAK-2 gene

<400> 3

Glu Ala Leu Ala Gly Leu Tyr Ala Leu Ala Thr His Arg Leu Tyr Ser
 1 5 10 15

Leu Tyr Ser Gly Leu Tyr Ala Ser Pro Ala Ser Pro Ala Leu Ala Ser
 20 25 30

Glu Arg Thr Tyr Arg Pro His Glu Gly Leu Pro Arg Thr His Arg Gly
 35 40 45

Leu Tyr Pro Arg Thr Tyr Arg Leu Glu Met Glu Thr Val Ala Leu Ala
 50 55 60

Ser Asn Val Ala Leu Thr His Arg Gly Leu Tyr Val Ala Leu Ala Ser
 65 70 75 80

Pro Gly Leu Tyr Leu Tyr Ser Gly Leu Tyr Ala Ser Asn Gly Leu Leu
 85 90 95

Glu Leu Glu Ser Glu Arg Pro Arg His Ile Ser Thr Tyr Arg Val Ala
 100 105 110

Leu Gly Leu Pro His Glu Pro Arg Ile Leu Glu Leu Tyr Ser Pro Arg
 115 120 125

Gly Leu Tyr Thr His Arg Thr His Arg Leu Glu Thr His Arg Leu Tyr
 130 135 140

Ser Gly Leu Leu Tyr Ser Ile Leu Glu Gly Leu Thr Tyr Arg Thr Tyr
 145 150 155 160

Arg Val Ala Leu Gly Leu Thr Arg Pro Ala Leu Ala Leu Glu Ala Ser
 165 170 175

Pro Ala Leu Ala Thr His Arg Ala Leu Ala Thr Tyr Arg Leu Tyr Ser
 180 185 190

Gly Leu Pro His Glu Ala Arg Gly Val Ala Leu Val Ala Leu Gly Leu
 195 200 205

Leu Glu Ala Leu Ala Pro Arg Ser Glu Arg Ala Leu Ala Leu Tyr Ser
 210 215 220

Ile Leu Glu Gly Leu Val Ala Leu Thr His Arg Thr Tyr Arg Thr Tyr
 225 230 235 240

Arg Ala Ser Pro Leu Tyr Ser Ala Ser Asn Leu Tyr Ser Leu Tyr Ser
 245 250 255

Gly Leu Gly Leu Thr His Arg Thr His Arg Leu Tyr Ser Ser Glu Arg
 260 265 270

Pro His Glu Pro Arg Ile Leu Glu Thr His Arg Gly Leu Leu Tyr Ser
 275 280 285

Gly Leu Tyr Pro His Glu Val Ala Leu Val Ala Leu Pro Arg Ala Ser
 290 295 300

Pro Leu Glu Ser Glu Arg Gly Leu His Ile Ser Ile Leu Glu Leu Tyr
 305 310 315 320

Ser Ala Ser Asn Pro Arg Gly Leu Tyr Pro His Glu Ala Ser Asn Leu
 325 330 335

Glu Ile Leu Glu Thr His Arg Leu Tyr Ser Val Ala Leu Val Ala Leu
 340 345 350

Ile Leu Glu Gly Leu Leu Tyr Ser Leu Tyr Ser
 355 360

<210> 4
 <211> 37
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> A primer SAK-1 for amplification

<400> 4
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37

<210> 5
 <211> 37
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> An oligonucleotide primer SAK-2

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<400> 5
cggctactgg atcctccact tttatccaaa ctgattt 37

<210> 6
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> An oligonucleotide primer SAK-3

<400> 6
gaacttaagg aagatataca tatgtcaagt tcattcgaca aagga 45

<210> 7
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> An oligonucleotide primer SAK-4

<400> 7
gaacttaagc atatggctgg agcttataaa aagggc 36

<210> 8
<211> 411
<212> DNA
<213> Staphylococcus aureu

<400> 8
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acaggcccgt atttgatggt aaatgtgact ggagttgatg gtaaaggaaa tgaattgcta 120
tcccctcatt atgtcgagtt tcctattaaa cctgggacta cacttacaaa agaaaaaatt 180
gaatactatg tcgaatgggc attagatgcg acagcatata aagagtttag agtagttgaa 240
ttagatccaa gcgcaaagat cgaagtcact tattatgata agaataagaa aaaagaagaa 300
acgaagtctt tccctataac agaaaaaggt tttgttgatc cagatttatc agagcatatt 360
aaaaaccctg gattcaactt aattacaaag gttgttatag aaaagaaata a 411

<210> 9
<211> 606
<212> DNA
<213> Staphylococcus aureus

<400> 9
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gatgacgcga gttattttga accaacaggc ccgtatttga tggtaaagt gactggagtt 120
gatggtaaag gaaatgaatt gctatcccct cattatgtcg agtttcctat taaacctggg 180
actacactta caaaagaaaa aattgaatac tatgtcgaat gggcattaga tgcgacagca 240

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tataaagagt ttagagtagt tgaattagat ccaagcgcaa agatcgaagt cacttattat	300
gataagaata agaaaaaaga agaaacgaag tctttcccta taacagaaaa aggttttggt	360
gtcccagatt tatcagagca tattaaaaac cctggattca acttaattac aaaggttggt	420
atagaaaaga aataaaacaa aatagttggt tattatagaa agtaatgtct tgattgaata	480
tgtgtagtga aattatcttt catcaaattc tcattcatgc acgaatgggt ctgccccacc	540
taatcagata ttacgtgact tatggggaga aatcagtttg gataaaagtg gaggatccag	600
tagccg	606

<210> 10
 <211> 377
 <212> PRT
 <213> Staphylococcus aureus
 <400> 10

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Tyr	Ser	Gly	Leu	Tyr	Leu	Tyr	Ser	Thr	His	Arg	Leu	Tyr	Ser	Leu	Tyr
			20					25					30		
Ser	Gly	Leu	Tyr	Ala	Ser	Pro	Ala	Ser	Pro	Ala	Leu	Ala	Ser	Glu	Arg
		35					40					45			
Thr	Tyr	Arg	Pro	His	Glu	Gly	Leu	Pro	Arg	Thr	His	Arg	Gly	Leu	Tyr
	50					55					60				
Pro	Arg	Thr	Tyr	Arg	Leu	Glu	Met	Glu	Thr	Val	Ala	Leu	Ala	Ser	Asn
65					70					75					80
Val	Ala	Leu	Thr	His	Arg	Gly	Leu	Tyr	Val	Ala	Leu	Ala	Ser	Pro	Gly
				85					90					95	
Leu	Tyr	Leu	Tyr	Ser	Gly	Leu	Tyr	Ala	Ser	Asn	Gly	Leu	Leu	Glu	Leu
		100						105				110			
Glu	Ser	Glu	Arg	Pro	Arg	His	Ile	Ser	Thr	Tyr	Arg	Val	Ala	Leu	Gly
	115						120					125			
Leu	Pro	His	Glu	Pro	Arg	Ile	Leu	Glu	Leu	Tyr	Ser	Pro	Arg	Gly	Leu
	130					135					140				
Tyr	Thr	His	Arg	Thr	His	Arg	Leu	Glu	Thr	His	Arg	Leu	Tyr	Ser	Gly
145					150					155					160

Leu Leu Tyr Ser Ile Leu Glu Gly Leu Thr Tyr Arg Thr Tyr Arg Val
 165 170 175

Ala Leu Gly Leu Thr Arg Pro Ala Leu Ala Leu Glu Ala Ser Pro Ala
 180 185 190

Leu Ala Thr His Arg Ala Leu Ala Thr Tyr Arg Leu Tyr Ser Gly Leu
 195 200 205

Pro His Glu Ala Arg Gly Val Ala Leu Val Ala Leu Gly Leu Leu Glu
 210 215 220

Ala Leu Ala Pro Arg Ser Glu Arg Ala Leu Ala Leu Tyr Ser Ile Leu
 225 230 235 240

Glu Gly Leu Val Ala Leu Thr His Arg Thr Tyr Arg Thr Tyr Arg Ala
 245 250 255

Ser Pro Leu Tyr Ser Ala Ser Asn Leu Tyr Ser Leu Tyr Ser Gly Leu
 260 265 270

Gly Leu Thr His Arg Thr His Arg Leu Tyr Ser Ser Glu Arg Pro His
 275 280 285

Glu Pro Arg Ile Leu Glu Thr His Arg Gly Leu Leu Tyr Ser Gly Leu
 290 295 300

Tyr Pro His Glu Val Ala Leu Val Ala Leu Pro Arg Ala Ser Pro Leu
 305 310 315 320

Glu Ser Glu Arg Gly Leu His Ile Ser Ile Leu Glu Leu Tyr Ser Ala
 325 330 335

Ser Asn Pro Arg Gly Leu Tyr Pro His Glu Ala Ser Asn Leu Glu Ile
 340 345 350

Leu Glu Thr His Arg Leu Tyr Ser Val Ala Leu Val Ala Leu Ile Leu
 355 360 365

Glu Gly Leu Leu Tyr Ser Leu Tyr Ser
 370 375

<210> 11

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> An oligonucleotide PEC-2 for preparing protein expression

cassette

<400> 11
gatcaagctt atcatcgata agcttacagg acgctgggtt aaaagtattt 50

<210> 12
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<223> An oligonucleotide PEC-2 for preparing protein expression cassette

<400> 12
atcttattga cctctcaaaa cttaatccac atcaaaactc aaatactttt aaccc 55

<210> 13
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<223> An oligonucleotide PEC-3 for preparing protein expression cassette

<400> 13
agaggtcaat aagattataa tatgtgatgc ttcacaattc tgatgtatgg caaaa 55

<210> 14
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> An oligonucleotide PEC-4 for preparing protein expression cassette

<400> 14
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